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APPLICATION NO. FILING DATE ATTORNEY DOCKET NO. CONFIRMATION NO. FIRST NAMED INVENTOR 10/621,623 07/16/2003 Ben-Zion Dolitzky 1662/60707 2588 26646 7590 07/09/2007 **EXAMINER** KENYON & KENYON LLP **ONE BROADWAY** STOCKTON, LAURA LYNNE NEW YORK, NY 10004 **ART UNIT** PAPER NUMBER 1626

> MAIL DATE **DELIVERY MODE** 07/09/2007 **PAPER**

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/621,623	DOLITZKY ET AL.
	Examiner	Art Unit
	Laura L. Stockton, Ph.D.	1626
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status	•	
1) Responsive to communication(s) filed on 19 Ap	oril 2007.	
	action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.		
4a) Of the above claim(s) <u>1-10</u> is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>11-20</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9)☐ The specification is objected to by the Examiner.		
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this National Stage		
application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of the certified copies not received.		
Attachment(s)		
1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date		
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)		
Paper No(s)/Mail Date 6)		

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DETAILED ACTION

Claims 1-20 are pending in the application.

Election/Restrictions

Applicant's election without traverse of Group II (claims 11-18) in the reply filed on October 28, 2005 was acknowledged in a previous Office Action. The requirement was deemed proper and therefore made FINAL in a previous Office Action.

Claims 1-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention. Election was made without traverse in the reply filed on October 28, 2005.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernhart et al. {U.S. Pat. 5,270,317} in view of Anderson et al. {WO 99/38847}, Cuadro et al. {Synthetic Communications, (1991), 21(4), pages 535-544} and Alvarez-Builla et al. {Tetrahedron (1990), 46(3), pages 967-978}.

Determination of the scope and content of the prior art (MPEP §2141.01)

Applicant claims a process of making irbesartan by the process found in instant Figure 1 (reproduced below).

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Figure 1
PTC Route to Irbesartan

2-Butyl-3-[2'-(1H-tetrazol-5-yl)-biphenyl-4-ylmethyl]1,3-diaza-spiro[4.4]non-1-en-4-one
IRB-00

Bernhart et al. (columns 1-4) teach a process of making N-substituted heterocyclic compounds of formula (I) (reproduced below) wherein a compound of formula 2 (reproduced below) is reacted with a compound of formula 3 (reproduced below).

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$$R_4$$
 R_5
 CH_2
 R_3
 R_2
 R_1
 R_3
 R_2
 R_1
 CH_2
 R_3
 R_2
 R_1
 R_3
 R_2
 R_1

Note in Bernhart et al. that variable R_2 can be hydrogen and R_1 can represent tetrazolyl or cyano (column 1, lines 52-56). Also see the process in column 9, lines 54-62, the products and the processes of making Example 5A) and Example 5C) in columns 20 and 21. Bernhart et al. further teach that it is well within the skill of one skilled in the art to convert, for example,

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tetrazolyl protected by a trityl group or a cyano group to a tetrazolyl group by known methods (column 9, lines 15-28).

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

Bernhart et al. do not teach the use of a phase transfer catalyst in the process. However, Anderson et al., which reference Bernhart et al. on page 2, teach the use of a phase transfer catalyst in the process taught by Bernhart et al. (page 4). Anderson et al. further teach the temperature, pressure, solvents, etc. (pages 7-10). Cuadro et al. teach the N-alkylation of azole compounds in a biphasic system and the use of phase transfer catalysts (page 537). Cuadro et al. reference Alvarez-Builla et al. (see Reference 14 on page 543) for additional phase transfer catalyst (see the last paragraph on page 968 of Alvarez-Builla et al.).

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Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)

The claimed process is no more than a selective combination of prior art teachings done in a manner obvious to one of ordinary skill in the art since each step of the process appears to be relatively complete in itself and there is no indication of an interaction between steps of such a type that would lead one of ordinary skill in the art to doubt that a substitution of alternative steps known to the art could be made.

In re Mostovych, 144 USPQ 38 (1964).

One skilled in the art would thus be motivated to combine the teachings of Bernhart et al., Anderson et al., Cuadro et al. and Alvarez-Builla et al. to arrive at the instant claimed process with the expectation of obtaining Irbesartan in short duration and with increased productivity as taught by Anderson et al. (page 7, lines 27 through to page 8, lines 1-2). The instant claimed process would have been suggested to

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one skilled in the art and therefore, would be obvious to one skilled in the art.

Response to Arguments

Applicant's arguments filed April 19, 2007 have been fully considered but they are not persuasive. Applicant argues that: (1) Bernhart et al. do not teach the use of a phase transfer catalyst in the process; Anderson et al. do not teach the process of making (2) 2-butyl-3-[2'-(triphenylmethyltetrazol-5-yl)-biphenyl-4-yl methyl]-1,3-diazaspiro[4.4]non-l-ene-4-one; (3) Bernhart et al. do not teach the instant process step a) by the use of a biphasic system and a phase transfer catalyst; (4) the instant claimed process allows one to employ milder bases that are more environmentally friendly, and thus, more stable for use on an industrial scale; and (5) there is a reduction of process steps when comparing the instant claimed process with the process taught by Anderson et al.

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All of Applicant's arguments have been considered but have not been found persuasive. The claims have been rejected under 35 USC 103 over a combination of prior art. The test for combining references is not what individual references themselves suggest but rather what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re McLaughlin, 170 USPQ 209 (1971). While a deficiency in a reference may overcome a rejection under 35 U.S.C. § 103, a reference is not overcome by pointing out that a reference lacks a teaching for which other references are relied. In re Lyons, 150 U.S.P.Q. 741, 746 (C.C.P.A. 1966).

Additionally, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re

Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re

Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

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As stated above, it was acknowledged that Bernhart et al. do not teach the use of a phase transfer catalyst in the process. Further, Anderson et al. is a secondary reference and as such, would not be expected to have every claim limitation.

Applicant argues that the instant claimed process allows one to employ milder bases that are more environmentally friendly, and thus, more stable for use on an industrial scale. In response, it is noted that the feature(s) upon which applicant relies (i.e., milder bases) is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Although, it is noted that Applicant discloses the same bases (page 3, lines 20-24 of the instant specification) as taught by Bernhart et al. (column 9, lines 54-58),

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Anderson et al. (see Example 1 on page 8, line 12) and Cuadro et al. (page 537).

Applicant argues that there is a reduction of process steps in comparing the instant claimed process with the process taught by Anderson et al. In response, since the term "comprising" is used (see, for example, instant claim 11), additional steps are embraced by the instant claimed invention. For all of the reasons given above, the instant claimed invention would have been obvious to one skilled in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura L. Stockton whose telephone number is (571) 272-0710. The examiner can normally be reached on Monday-Friday from 6:15 am to 2:45 pm. If the examiner is out of the Office, the examiner's supervisor, Joseph McKane, can be reached on (571) 272-0699.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for

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unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

The Official fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Laura L. Stockton, Ph.D.

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Patent Examiner

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